

## CATALYST ENHANCEMENT

- 5 [0001] This invention relates to the production of higher hydrocarbons from synthesis gas utilizing a metal catalyst, particularly a cobalt catalyst.

### RELATED APPLICATIONS

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10/059,926  
10/059,927  
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all filed 1-29-02.
- 15 [0002] The assignee of this application is filing herewith the following applications: Docket No. 37227, entitled "Fischer-Tropsch Catalyst Enhancement"; Docket No. 37228, entitled "Supported Catalyst Regeneration"; Docket No. 37229, entitled "Supported Catalyst Activation"; Docket No. 39158, entitled "Supported Catalyst Treatment"; and Docket No. 39774, entitled "Catalyst Regeneration". Also related in pending application Serial No. 09/628,047, filed August 1, 2000, entitled "process for Increasing Cobalt Catalyst Hydrogenation Activity Via Aqueous Low Temperature Oxidation".

### BACKGROUND OF THE INVENTION

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- [0003] The conversion of synthesis gas, i.e. carbon monoxide and hydrogen, to higher value products is well known and has been in commercial use for many years. Typical processes include, for example, methanol syntheses, higher alcohol synthesis, hydroformylation and Fischer-Tropsch synthesis. The synthesis gas mixture is contacted with a suitable catalyst typically comprising at least one Group VIII metals. Suitable Fischer-Tropsch catalysts comprise one or more catalytic Group VIII metals, such as iron, cobalt and nickel. For oxygenate synthesis, copper may be included as well.
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